alcohol abuse, identify the family members affected by it and often will be aware of other key persons in the patient's life. If individual office counseling is ineffective, the physician can inform the significant others of this technique and coordinate planning with a local alcohol treatment facility. Finally, by attending the intervention meeting, the physician can dramatically underscore the gravity of the physical effects of continued drinking and demonstrate the depth of the physician's concern for the patient. With more professional attention and systematic problem-solving of the personal, familial and social factors contributing to alcoholism, approaches like this can help reduce the widespread tragedy of this preventable health problem.

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Panic Disorder

PANIC DISORDER, commonly known as panic "attacks," is listed in *The Diagnostic and Statistical Manual of Mental Disorders*, third edition (DSM III), under "anxiety disorders." This disorder was described by Freud as early as 1895, and recent studies have provided new information. Panic disorder occurs in 4 to 12 people per 1,000 of the general population and occurs in women three times as often as in men. It usually begins in late adolescence or early adulthood, but may also begin in mid-adult life. It can be limited to several episodes or become a chronic condition.

Many patients with panic disorder, not attributing their symptoms to anxiety, present to their primary care physicians for evaluation. They describe sudden and unpredictable feelings of fear or terror accompanied by autonomic symptoms. Thoughts of dying or going crazy are often reported. Albeit infrequently, panic attacks can be triggered by certain stimuli. They usually resolve spontaneously within minutes, but have been known to last for hours. To meet DSM III criteria, there must be three panic attacks within a three-week period, not during extreme physical exertion or a life-threatening situation. Physical symptoms commonly reported during an attack include shortness of breath, chest pain, palpitations, tingling in the extremities, dizziness or faintness, sweating, hot or cold flushes and trembling.

Recent studies of patients with panic disorder have led to interesting insights into its pathophysiology, and there are some data that suggest a genetic transmission of this condition. Positron emission tomography has shown decreases in left to right parahippocampal blood flow and oxygen metabolic rates, indicating the possible role of noradrenergic or serotonergic central mediation. No demonstrable increase in the blood levels of β -endorphin, cortisol or luteinizing hormone provides evidence against the theory that panic attacks are controlled by a pituitary-adrenal activation mechanism. Studies have shown that a variety of substances infused peripherally can precipitate a panic attack in patients who al-

ready have the condition, but not in normal controls. Imipramine hydrochloride, monoamine oxidase-inhibitors and alprazolam block these induced attacks.

The differential diagnosis should include medical and psychiatric disorders. Cardiovascular symptoms are reported most frequently. Although a causal association has not been proved, it was recently reported that 34% of patients with panic attacks also have a mitral valve prolapse. The possibility of alcohol or sedative withdrawal and caffeine or amphetamine intoxication should be investigated. In the differential diagnosis of other psychiatric conditions, major depression and agoraphobia should be considered.

Pharmacologic intervention has been proved effective when adequate dosages are given for sufficient lengths of time. Imipramine hydrochloride in dosages of 75 mg to 150 mg a day is generally the drug of choice, and other tricyclic antidepressants may also be effective. Alprazolam in divided dosages of 3 mg to 6 mg a day can be used, but one should begin with a lower dose and titrate it to a level that relieves the panic attacks. This is a new medication and may be associated with physical and psychological dependence. Phenelzine sulfate is not a first-line drug of choice and should be reserved for those instances wherein patients have failed to respond to the other medications. It can be used in dosages of 60 mg to 90 mg, but there are strict food and drug restrictions associated with its use. Once a medication has been successful in treating panic disorder, its use should be continued for about six months, then the dose slowly tapered, watching for recurrence of panic attacks.

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Estrogen-Progesterone Replacement at Menopause

WIDE ACCEPTANCE now exists for prescribing short-acting oral estrogens in the lowest effective dose for cyclic replacement in women entering menopause naturally or surgically. Indications are for maintaining bone mass and preventing osteoporosis, which accelerates at the climacteric without intervention. Estrogen replacement only (dependent on dosage) increases the risk of endometrial cancer fivefold. A dosage-response hepatitis rarely develops with the administration of estrogen. Yet, 1.2 million bone fractures a year happen to women older than 60 years who are not taking estrogen. The risk of death from hip fracture rises rapidly after the age 60 from 20% to as high as 50% at age 80. Each year more women die of preventable hip fractures than of all ovarian-endometrial cancers combined.

To avoid the endometrial hyperplasia for women with their uteruses intact and yet protect against the multiorgan symptoms of estrogen deficiency, the use of estrogen is now recommended to be combined with 10 to 13 days of progestin use in a cyclic manner similar to the physiologic pattern of a premenopausal woman. A typical protocol is 25 days per

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month of 0.625 mg conjugated estrogen paired with 10 mg progesterone the last 10 to 13 days of the 25-day cycle. Some women will resume menses with this and will need endometrial sampling to assure there is no adenomatous hyperplasia. Progestin administration is probably indicated in women after a hysterectomy to protect the breast from unopposed estrogen for what will be the rest of a woman's life. The use of progesterone apparently increases the risk of cardiovascular disease, including hypertension, angina and coronary artery disease. The pattern of women at risk is poorly defined at this time but appears to be the same as for birth control pills—that is, smokers and a family history. The hepatic effect of oral estrogen use includes hypertension, cholelithiasis and intravascular clotting, which are lessened with low-dose cyclic usage and future newer estrogen analogs that are being researched. Women completing treatment for breast and other malignant lesions may still be candidates for estrogen replacement; an oncology consultation is recommended.

All women need dietary education to include calcium (1.0

grams per day to age 60, 1.5 grams thereafter), vitamin D (with sunshine during exercise), fluoride (1.0 ppm in water or 1.0 mg tablet per day) and exercise in their daily routine to minimize osteoporosis. It is also well established now that in postmenopausal women, low-dose, cyclically given estrogen added to this regimen will further minimize osteoporosis and in most instances is probably indicated. The more complex pharmacologic issues to be resolved are what type and how much estrogen and progesterone are best for overall health.

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